

## REMARKS

Reconsideration of the application is respectfully requested. The following paragraph numbers correspond to paragraph numbers in the Detailed Action.

2. The limitation "not comprising a catalytic element" has been removed, without prejudice to Applicant's right to pursue a similar strategy in the within application.

4. Examiner has rejected claims 27-32 and 36 as being anticipated by US 4,650,621 to Sago (the "Sago reference"). With respect, it is submitted that Sago fails to teach all of the limitations of claim 27 or any claim which depends from claim 27.

Applicants acknowledge that Sago teaches a heat exchange element which comprises a matrix of ceramic fibres mixed with ceramic particles. However, it is submitted that the Sago heat exchange element is neither flexible nor compressible. In fact, it is demonstrably rigid and non-compressible. At column 5, lines 57-62, it is stated that:

"The paper after the molding is finished or the paper completed in a slab form without being molded, is next uniformly impregnated with colloidal silica or ethyl silicate, after which *the impregnated silicon compounds are converted into silicic acid gel thereby resulting in hardening.*" [emphasis added]

As well, it is stated in column 6, lines 45-48:

"Also as the molding process carried out during the preparation is extremely easy even though it is an integrated *rigid* ceramic fiber paper ..."

The heat exchange element of Sago is therefore a rigid incompressible member. The silicic acid gel which impregnates the member acts as a hardening resin. It is apparent that such a rigid,

incompressible element could not function as a seal in a fuel cell. As stated in the present specification, the seal must be flexible and compressible to conform to the sealing surfaces and allow the fuel cell stack to be compressed relatively uniformly.

Furthermore, it is submitted that the molecular sieve particles of the Sago reference are not the equivalent of the solid ceramic particles of the present invention. Molecular sieve particles are by definition highly porous with large surface area. Such particles are not contemplated by the solid ceramic particles preferred with the present invention. Please note that the limitation of claim 27 requires "solid particles".

Therefore, it is submitted that claim 27 cannot be anticipated by the Sago reference and is therefore patentable. It follows that claims 28-36 which depend from claim 27 are also patentable.

7. Applicant gratefully acknowledges that previous arguments have been carefully considered but have been rendered moot in view of the rejection based on the Sago reference.

8. Applicant gratefully acknowledges that Examiner's prior art rejections over Sanocki and Numamoto have been overcome by the amendment and response filed on 08/28/2003.

9. Applicant gratefully acknowledges the Examiner's finding of allowable subject matter in claims 34 and 35. New claims 36 and 37 have been added and are independent claims containing all of the limitations of claims 34 and 35.

## CONCLUSION

In view of the foregoing remarks and amendments, it is respectfully submitted that this application is in condition for allowance and allowance thereof is respectfully requested.

Respectfully submitted,

Debabrata Ghosh

By:

Edward Yoo (Reg. No. 41,435)

CORRESPONDENCE ADDRESS:  
CUSTOMER No. 22828